

REMARKS

This paper is submitted in reply to the Office Action dated November 29, 2001, within the three-month period for response. Reconsideration and allowance of all pending claims are respectfully requested.

In the subject Office Action, claims 4-6 were rejected under 35 U.S.C. § 112 second paragraph. Moreover, claims 1-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,436,803 to Annis et al. Additionally, the Examiner objected to the drawings for failure to show every feature of the claimed invention specified in the claims, specifically, in claims 4-6.

Applicants respectfully traverse the Examiner's rejections to the extent that they are maintained. Applicants have now amended claim 1, and respectfully submit that no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned "Version with Markings to Show Changes Made."

The Examiner's rejections will now be addressed in the order in which they appear in the Office Action.

Drawings

First in the subject Office Action, the drawings were objected to by the Examiner for failure to show every feature of the invention specified in the claims, specifically, for failing to show the "gripping device" in claims 4-6. However, as described at page 7, lines 16-18, of the Application, Applicants disclose that the gripping device may be embodied for example, as an adhesive strip or a magnetic strip, the positioning of which on a sheet of shielding material would be well apparent to one of ordinary skill in the art having the benefit of the instant disclosure. Accordingly, Applicants request that the objection to the drawing be withdrawn.

Section 112 Rejections

Next in the subject Office Action, claims 4-6 were rejected under 35 U.S.C. § 112, second paragraph, as the Examiner felt the use of the term "gripping device" was unclear. In particular, the Examiner was unsure as to whether a "gripping device" and a "grounding member" had the same function.

However, a "grounding member" is described at page 7, lines 10-14, while a "gripping device" is described at page 7, lines 15-23. An exemplary grounding member is shown to be a ground strap having alligator clips for grounding the sheet. Exemplary gripping devices are described as adhesive strips, magnetic strips, hooks, etc. The distinction between these two components should be clear from the application.

In one embodiment, it is described how a gripping device might also function as a grounding member, however this is not required. Nonetheless, Applicants submit that the different functions and configurations of the described "grounding member" and "gripping device" are adequately described to one of ordinary skill in the art, and thus, these terms are not unclear in the claims. Withdrawal of the §112 rejections is therefore respectfully requested.

Art-Based Rejections

Finally in the subject Office Action, claims 1-13 were rejected as being anticipated by Annis et al.

First, with respect to claim 1, this claim as amended now recites a device for protecting components within an electronic system from radiated electromagnetic energy during concurrent maintenance. The device comprises a sheet of electromagnetic shielding material sized to overlay a portion of the electronic system, an opening formed in the sheet and sized for accessing the components within the electronic system, and a grounding member electrically coupled to the sheet and adapted to be coupled to a ground. The grounding member includes a wire terminated with a clip for removably coupling the grounding member to ground.

In rejecting claim 1, the Examiner relies on Annis et al., which discloses an EMI shielding envelope used to shield an electrical board in a laptop computer. Annis et al. does disclose a flap 64 that permits an integrated circuit package to be removed, e.g., to allow a processor chip to be updated with an improved processor chip (column 8, lines 22-40). Moreover, Annis et al. discloses that the envelope is coupled to circuit ground via a connecting element such as a screw passed through the envelope (column 5, lines 50-53). Alternative means for coupling the envelope to the circuit ground of the circuit card enclosed therein are described as a clamping means or conductive adhesive (column 8, lines 52-57).

Applicants respectfully submit that Annis et al. does not disclose a device protecting components within an electronic system from radiated electromagnetic energy during concurrent maintenance. The only maintenance operations described in connection with the Annis et al. device is that of replacing a processor chip. However, there is no disclosure or suggestion in the reference that such a replacement operation can occur while the device is active and in an operational state.

Moreover, Annis et al. does not disclose a grounding member including a wire terminated with a clip for removably coupling the grounding member to ground. The preferred embodiment in Annis et al. discloses a screw extending through an envelope, and alternative embodiments only described conductive adhesive or a "clamping means."

Furthermore, Applicants respectfully submit that there is no suggestion in the reference of a device suitable for protecting an electronic system during concurrent maintenance. As shown, the Annis et al. device is intended for a more or less permanent installation, as evidenced by the placement of the device in an operational portable computer, as well as the use of a screw to ground the envelope in the computer. In contrast, Applicants claim is directed to a device suitable for use in concurrent maintenance operations. As such, the use of a grounding member that includes a wire terminated with a clip provides a substantially portable and easily removable and

installable device suitable for performing concurrent maintenance operations on a wide variety of devices.

Applicants therefore respectfully submit that claim 1 is novel and non-obvious over Annis et al. Reconsideration and allowance of claim 1, as well as claims 2-8 which depend therefrom, are therefore respectfully requested.

Next, with respect to independent claim 9, this claim generally recites a method of performing concurrent maintenance on an electronic system, including shrouding at least a portion of an enclosure of an electronic system with a sheet of shielding material while the electronic system is operating, grounding the sheet, and performing concurrent maintenance on the electronic system.

As described above, Annis et al. does not disclose performing concurrent maintenance on an electronic system while a sheet of shielding material is shrouded over at least a portion thereof. As described, for example, at page 1 of the application, concurrent maintenance refers to diagnosing problems and correcting failures in an electronic system while the system continues to operate in a normal manner. Given, in particular, the high availability requirements of many computer systems, system down time is highly undesirable in many situations. The claimed method improves on conventional concurrent maintenance operations by providing protection from radiated electromagnetic susceptibility through the use of a sheet of shielding material that shrouds at least a portion of an enclosure of an electronic system.

Annis et al. does not disclose or suggest claim 9. In particular, Annis et al. does not disclose a method of performing concurrent maintenance. As described above, Annis et al. discloses, at the most, replacing a chip on a circuit board. However, it should be noted that such a replacement operation (which is described in connection with a processor chip) is not described as being a concurrent maintenance operation. In fact, given that the chip being replaced is a processor chip, it is highly unlikely that a laptop computer thus configured could continue to operate while the processor chip was being

replaced. The most reasonable interpretation is that the computer would be shut off during the replacement operation.

Moreover, Annis et al. does not disclose shrouding at least a portion of an enclosure of an electronic system with a sheet of shielding material while the electronic system is operating. It appears that the envelope disclosed in Annis et al. is installed during production, and prior to operation of the laptop computer. Moreover, Annis et al. discloses placing a circuit board within an envelope. However, the enclosure of the laptop computer is not housed within the envelope.

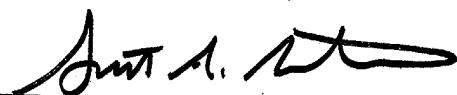
Accordingly, Applicants respectfully submit that claim 9 is likewise novel and non-obvious over Annis et al. Reconsideration and allowance of claim 9, as well as claims 10-13, are therefore respectfully requested.

In summary, Applicants respectfully submit that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

27 FEB 2002

Date



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